

REMARKS

Upon entry of the present amendment, each of claims 1-6 will have been amended to enhance clarity and are being submitted for reconsideration by the Examiner.

Applicant respectfully acknowledges, with thanks, the Examiner's indication of allowable subject matter in the present application. In view of the hereincontained amendments, Applicant submits that the pending claims have been revised to ensure that the language is clear and in full compliance with English language, idiom, grammar and syntax.

In the outstanding Official Action, the Examiner acknowledged receipt of Applicant's papers filed under 35 U.S.C. § 119 based on an application filed in Korea. However, the Examiner asserted that Applicant has not complied with requirements of 37 C.F.R. § 1.63(c) since the oath, declaration or Application Data Sheet does not acknowledge filing of the foreign patent application. The Examiner required a new oath, declaration or Application Data Sheet.

Applicant respectfully submits that the Examiner is incorrect. In this regard, while Applicant's declaration does not refer to the filing of the foreign application, Applicant's Application Data Sheet does refer to such filing. Accordingly, Applicant submits that he has complied with the requirements of 37 C.F.R. § 1.63(c). Nevertheless, should the Examiner, upon review of the present application, determine that the Application Data Sheet of record herein does not contain an appropriate reference to the foreign priority document, the Examiner is respectfully requested to contact the undersigned at the below listed telephone number and a New Application Data Sheet will be promptly submitted.

Applicant additionally thanks the Examiner for accepting the drawings filed in the present application on December 2, 2003. Applicant further thanks the Examiner for acknowledging the claim for foreign priority under 35 U.S.C. § 119 and for confirming that the certified copy of the

foreign priority document has been received. Applicant additionally thanks the Examiner for considering the documents cited in the Information Disclosure Statement filed in the present application on March 9, 2004, by the return of the signed and initialed PTO-1449 Form attached thereto.

In the outstanding Official Action, the Examiner objected to the specification because of a noted informality. By the present response, Applicant has amended the specification to eliminate the noted informality. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding objection to the specification.

In the outstanding Official Action, the Examiner rejected claims 1-6 under 35 U.S.C. § 112, first paragraph, as based on a disclosure which is not enabling. The Examiner asserted that the setting of the phase deficiency device is critical or essential to the practice of the invention, but not included in the claims, is not enabled by the disclosure.

The Examiner specifically indicated that the specification does not contain a description of how the latch lever is set to its operating position of restricting the movable contactor. The Examiner further asserted that the specification does not disclose a device or method to maintain the latch lever in a blocking position when a normal current is first applied until the bimetal heats sufficiently to cause the interlock lever and the connection bar to keep the latch lever in its blocking position.

Applicant respectfully traverses the above rejections and submits that they are inappropriate. In this regard, Applicant notes that the present invention is related a phase deficiency display device which is operable to display a phase deficiency condition or state. How the latch lever is set back into its operating position is therefore not a feature of the present invention. As the Examiner notes, this feature is not recited in the claims.

Nevertheless, Applicant notes that setting or resetting of the latch lever into its operating position can be performed in any conventional fashion such as via a mechanical link, via a mechanically actuated lever, via a mechanical linkage or through an appropriate electromagnetic mechanism. Further, for purposes of 35 U.S.C. § 112, first paragraph, it is even adequate if the present device works once and is then discarded, although this is certainly not an intended operation of the present invention.

Regardless of the above, Applicant respectfully submits the following explanation to clarify the non-claims aspects of the circuit breaker to which the present invention is applied so as to assist the Examiner in fully understanding and appreciating the manner in which the present invention operates and how the apparatus of the present invention is set into its original preoperational position after a series of operations that display the phase deficiency is performed.

Initially, upon occurrence of a phase deficiency, the shifter 5 moves towards the right so as to rotate the interlock lever 12 clockwise about the pin 13. The latch lever 15 is then rotated counterclockwise and the movable contactor 9 is moved up by the spring 11 as the end of the latch lever disengages therefrom in association with rotation of the latch lever. Accordingly, the movable contact and the stationary contact come to contact with each other, thus resulting in operation of the display section. Of course, concurrent with the movement of the shifter, a driving latch (which is not shown since it is not part of the present invention), is rotated via the shifter lever 6 to thereby break the circuit. As a result of the breaking of the circuit, the other bimetal element in which the phase deficiency has not occurred, changes from the normally curved state to a flat state.

In order to reset the latch lever and the movable contact to their original positions, from the state in which the circuit has been broken as a result of the phase deficiency, a handle is rotated to the

ON position so as to cause, via operation of a mechanical linkage, circuit-closing contact between movable and stationary elements. Thus, electric current is again conducted by the circuit.

As a result, the bimetal element which has assumed a flat shape, is heated by electric current conducted therethrough so as to again take on a curved state and the shifters move to their original positions. The shifters are then operable to press the movable contactor downward to the position shown in Fig. 5A.

Accordingly, and in response to the Examiner's query, and although this aspect of the thermal magnetic type molded case circuit breaker is not a claimed feature of Applicant's invention, the setting and resetting of the device is achieved by a mechanical mechanism.

In response to the Examiner's second query regarding maintaining the latch lever in a blocking position when normal current is first applied, the Examiner is correct that the heating of the bimetal, which occurs shortly after current is supplied to the device, causes the interlock lever and the connection bar to keep the latch lever in the blocking position.

In view of the above discussion, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-6 under 35 U.S.C. § 112, first paragraph. As noted above, Applicant's disclosure is fully enabling of the claimed invention. Further, Applicant has completed the record and responded to the queries raised by the Examiner regarding the operation of the breaker to which this invention is applied.

The Examiner further rejected claim 1 because a phrase is not enabling. By the present response, Applicant has amended claim 1 to eliminate the basis for the Examiner's rejection. Accordingly, the Examiner is respectfully requested to reconsider and withdraw each of the outstanding objections and rejections in the present application in view of the hereincontained amendments and remarks.

Applicant notes with appreciation the Examiner's indication that claim 1 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. § 112, second paragraph, set forth in this Official Action. It is assumed that the Examiner's reference is to the rejection under 35 U.S.C. § 112, first paragraph. Nevertheless, in view of the hereincontained amendments and remarks, it is respectfully submitted that appropriate amendments and remarks have been submitted as to eliminate any basis for the above-noted rejection or objection.

Applicant further notes the Examiner's Statement of Reasons for Allowance. In this regard, while Applicant does not disagree with the features enumerated by the Examiner, Applicant further points out that each of the claims of the present application defines a combination of features and that the patentability of each claim is thus based on a particular combination of features recited therein. Accordingly, the reasons for allowability should not be limited to those reasons set forth by the Examiner.

SUMMARY AND CONCLUSION

Applicant has made a sincere effort to place the present application in condition for allowance and believes that he has now done so. Applicant has amended the claims for clarity without narrowing the scope thereof. Applicant has further traversed the Examiner's rejection under 35 U.S.C. § 112, first paragraph, and has also amended the claims and specification to eliminate any basis for the Examiner's objection thereto and rejection thereof. Accordingly, and at least for the reasons set forth in the Examiner's indication of allowable subject matter, Applicant respectfully submits that all the claims in the present application are now in clear condition for allowance and respectfully requests an indication to such effect, in due course.

As Applicant has provided a clear evidentiary basis supporting the patentability of all the claims in the present application, Applicant respectfully requests an indication to such effect.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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